Cognitive Benefits of Being Bilingual: The Effect of Language Learning on the Working Memory in Emerging Miao-Mandarin Juveniles in Rural Regions of China

Authors: Peien Ma

Abstract : Bilingual effect/advantage theorized the positive effect of being bilingual on general cognitive abilities, but it was unknown which factors tend to modulate these bilingualism effects on working memory capacity. This study imposed empirical field research on a group of low-SES emerging bilinguals, Miao people, in the hill tribes of rural China to investigate whether bilingualism affected their verbal working memory performance. 20 Miao-Chinese bilinguals (13 girls and 7 boys with a mean age of 11.45, SD=1.67) and 20 Chinese monolingual peers (13 girls and 7 boys with a mean age of 11.6, SD=0.68) were recruited. These bilingual and monolingual juveniles, matched on age, sex, socioeconomic status, and educational status, completed a language background questionnaire and a standard forward and backward digit span test adapted from Wechsler Adult Intelligence Scale-Revised (WAIS-R). The results showed that bilinguals earned a significantly higher overall mean score of the task, suggesting the superiority of working memory ability over the monolinguals. And bilingual cognitive benefits were independent of proficiency levels in learners' two languages. The results suggested that bilingualism enhances working memory in sequential bilinguals from low SES backgrounds and shed light on our understanding of the bilingual advantage from a psychological and social perspective.

Keywords: bilingual effects, heritage language, Miao/Hmong language Mandarin, working memory

Conference Title: ICBBLP 2020: International Conference on Bilingualism and Bilingual Language Processing

Conference Location : Amsterdam, Netherlands **Conference Dates :** December 03-04, 2020